

Notice of Allowability

Application No.

9/778,702

Applicant(s)

BHATT ET AL.

Examiner

Jose H Alcala

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 5/13/03.
2. ☒ The allowed claim(s) is/are 9-11, 15-20 and 22-31.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
(a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No. _____.
(b) ☒ including changes required by the proposed drawing correction filed 13 May 2003, which has been approved by the Examiner
(c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1 ☐ Notice of References Cited (PTO-892)
3 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
5 ☐ Information Disclosure Statements (PTO-1449), Paper No. _____.
7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 2 ☐ Notice of Informal Patent Application (PTO-152)
4 ☐ Interview Summary (PTO-413), Paper No. _____.
6 ☐ Examiner's Amendment/Comment
8 ☒ Examiner's Statement of Reasons for Allowance
9 ☐ Other

Allowable Subject Matter

Drawings

1. The corrected or substitute drawings were received on 5/13/03. These drawings are approved.

Reasons for Allowance


2. The prior art fails to teach, disclose, or suggest, either alone or in combination, at least on claims 1 and 28, a printed wiring board comprising: a dielectric substrate having upper and lower surfaces; at least one landless filled plated through hole disposed through the substrate from the upper to the lower surface, the through hole having a first diameter; the through hole further comprising an inner surface extending from the upper to the lower surface, the inner surface plated with a conductive metal plating, the inner surface plating having an upper end aligned with the substrate upper surface and a lower end aligned with the substrate lower surface; the through hole filled with a filler composition having upper and surfaces, wherein the filler composition upper surface is aligned with the dielectric substrate upper surface and the through hole inner surface plating upper end, the filler composition upper surface, substrate upper surface and inner surface plating upper end, thereby defining a smooth upper subcomposite surface; and an additively plated unetched first circuitry line having a bottom surface plated directly onto the at least one plated through hole inner surface plating upper end and said upper subcomposite surface and thereby electrically

connected to said plated through hole, the first circuit line further comprising a top surface having a common line width approximately equal to or less than the first diameter. Therefore, dependent claims 10,11,15-20,22-27 and 29-31 are also allowed.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jose H Alcala whose telephone number is (703) 305-9844. The examiner can normally be reached on Monday to Friday.
4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Talbott can be reached on (703) 305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.
5. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JHA
June 16, 2003



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